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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,189	12/23/1999	YUKIO MIYAMARU	0505-0590P	7128

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EXAMINER	
LELE, TANMAY S	
ART UNIT	**PAPER NUMBER**
2684	13

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/471,189	Applicant(s) MIYAMARU ET AL.	
	Examiner Tanmay S Lele	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 April 2004 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1 – 13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaoru (Kaoru, Japanese Patent Application No. 01-077803) in view of Koichi et al. (Koichi, Japanese Patent Application No. 05-036851) in further view of Yamaha Hatsudoki (Yamaha, Japanese Patent Application No. 62-94447).

Regarding claim 1, Kaoru teaches of a vehicular communication apparatus (Figure 7) comprising: at least one helmet worn by an operator of a vehicle, said at least one helmet incorporated with a speaker and a microphone mounted thereon, and further including a mounted

helmet side infrared transmitter/receiver connected to the speaker and the microphone (Figures 5 and 7 and Constitution); a vehicle body provided with a vehicle body side transmitter/receiver for carrying wireless communication means connected to the vehicle body side infrared transmitter/receiver (Figures 4B, 6A and 6B, 5, 7, and 9 and the Constitution); that signals emitting from/to the transmitter/ receiver pass direct over a shoulder of the operator of the vehicle to/from a helmet of a rear passenger of the vehicle (Figures 5, 7, and 9 and the Constitution).

Kaoru does not specifically teach of and the transmitter/receiver being disposed on a rear surface of a handlebar adjacent to the grip (though does teach of mounting the device on the towards the front of the motorcycle as shown Figures 4B and 7) and arranged with communication operating means separately from the wireless communication means in at a position operably accessible to the operator during operation of the vehicle (though makes reference to such in Figures 4B, 6A and 6B, 5, 7, and 9 and the Constitution).

In a related art dealing with wireless motorcycle devices, Koichi teaches of the transmitter/receiver being disposed on a rear surface of a handlebar adjacent to the grip (Figures 6 and 8 and the Constitution).

It would have been obvious to one skilled in the art at the time of invention to have included into Kaoru's vehicle communication device, Koichi's location near the grip, for the purposes of operation of the transmitter/receiver safely without removing hands from the handlebars, as taught by Koichi.

Kaoru in view of Koichi do not specifically teach of arranged with communication operating means separately from the wireless communication means in at a position operably

accessible to the operator during operation of the vehicle (though Koichi does teach of reception via loudspeaker in the constitution and paragraph 0010).

In a related art dealing with a vehicular communications device, Yamaha teaches of arranged with communication operating means separately from the wireless communication means in at a position operably accessible to the operator during operation of the vehicle (note the PTT button 13).

It would have been obvious to one skilled in the art at the time of invention to have included into Kaoru and Koichi's vehicle communications device with receiver buttons by the rip, Yamaha's location and PTT (push to talk) button, for the purposes of talking while safely operating the device while operating the vehicle, as taught by Yamaha.

Regarding claim 6, Kaoru teaches of a vehicular communication apparatus (Figure 7) comprising: at least one helmet worn by an operator of a vehicle, said at least one helmet incorporated with a speaker and a microphone mounted thereon, and further including a mounted helmet side infrared transmitter/receiver connected to the speaker and the microphone (Figures 5 and 7 and Constitution); wireless communication means connected to the helmet side infrared ray transmitter/receiver, said wireless communication means being carried or attached to the operator (Figures 3, 5, 6A, 6B, and 7, and the Constitution); a vehicle body mounted with a vehicle body side infrared transmitter/receiver for carrying out infrared communication with the helmet side infrared ray transmitter/receiver (Figures 4B, 6A and 6B, 5, 7, and 9 and the Constitution); that signals emitting from/to the transmitter/receiver pass directly over a shoulder of the operator of the vehicle to/from a helmet of a rear passenger of the vehicle (Figures 5, 7, and 9 and the Constitution).

Kaoru does not specifically teach of and the transmitter/receiver being disposed on a rear surface of a handlebar adjacent to the grip (though does teach of mounting the device on the towards the front of the motorcycle as shown Figures 4B and 7) and arranged with communication operating means separately from the wireless communication means in at a position operably accessible to the operator during operation of the vehicle (though makes reference to such in Figures 4B, 6A and 6B, 5, 7, and 9 and the Constitution).

In a related art dealing with wireless motorcycle devices, Koichi teaches of the transmitter/receiver being disposed on a rear surface of a handlebar adjacent to the grip (Figures 6 and 8 and the Constitution).

It would have been obvious to one skilled in the art at the time of invention to have included into Kaoru's vehicle communication device, Koichi's location near the grip, for the purposes of operation of the transmitter/receiver safely without removing hands from the handlebars, as taught by Koichi.

Kaoru in view of Koichi do not specifically teach of arranged with communication operating means separately from the wireless communication means in at a position operably accessible to the operator during operation of the vehicle (though Koichi does teach of reception via loudspeaker in the constitution and paragraph 0010).

In a related art dealing with a vehicular communications device, Yamaha teaches of arranged with communication operating means separately from the wireless communication means in at a position operably accessible to the operator during operation of the vehicle (note the PTT button 13).

It would have been obvious to one skilled in the art at the time of invention to have included into Kaoru and Koichi's vehicle communications device with receiver buttons by the rip, Yamaha's location and PTT (push to talk) button, for the purposes of talking while safely operating the device while operating the vehicle, as taught by Yamaha.

Regarding claims 3 and 8, Kaoru in view of Koichi and Yamaha teach all the claimed limitations as recited in claims 1 and 6. Kaoru further teaches of the helmet side infrared ray transmitter/receiver is arranged at least at a front face of the helmet (Figures 4A, 5, 7, and 8, and the Constitution), both Kaoru and Koichi teach of wherein the vehicle is a handlebar type vehicle (Kaoru: Figures 1, 4A, 4B and 7 and the Constitution; Koichi: Figures 6 and 8 and the Constitution), and Koichi teach of the vehicle body side infrared ray transmitter/receiver is arranged at a position offset to either a left side and a right side of the handlebar (Figures 6 and 8 and the Constitution).

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaoru (Kaoru, Japanese Patent Application No. 01-077803) in view of Yamaha Hatsudoki (Yamaha, Japanese Patent Application No. 62-94447) in further view of Hodsdon (Hodsdon, US Patent No. 4,972,051).

Regarding claim 11, Kaoru teaches of a vehicular communication apparatus Figure 7), comprising: a helmet worn by a passenger of a handlebar type small-sized vehicle, said helmet incorporated with a speaker and a microphone and mounted with a helmet side infrared ray transmitter/receiver connected to the speaker and the microphone (Figures 5 and 7 and Constitution); a vehicle body is arranged with a vehicle body side infrared transmitter/receiver for carrying out infrared ray communication with the helmet side infrared ray transmitter

/receiver (Figures 4B, 6A and 6B, 5, 7, and 9 and the Constitution); and a cabinet having a shape that is substantially rectangular (Figure 6A and 6B), the cabinet housing the vehicle body side transmitter/receiver (Figures 5, 6A, 6B, and 9), a light emitting element (Figure 6A and 6B), a light receiving element (Figure 6A and 6B).

Kaoru does not specifically teach of disposed along a section of a rear surface of a handlebar adjacent to a grip; a visual display, and communication operating means, and the light emitting element and the light receiving element being disposed above the visual display on a rear face of the cabinet.

In a related art dealing with a vehicular communications device, Yamaha teaches of disposed along a section of a rear surface of a handlebar adjacent to a grip (Figure 1 note device 14), and communication operating means (note the PTT button 13).

It would have been obvious to one skilled in the art at the time of invention to have included into Kaoru's vehicle communications device, Yamaha's location, for the purposes of safely operating the device while operating the vehicle, as taught by Yamaha.

Kaoru in view of Yamaha do not specifically teach of a visual display and the light emitting element and the light receiving element being disposed above the visual display on a rear face of the cabinet (though it should be noted Kaoru teaches of light emitting elements for transmitting and receiving waves as per Figures 5, 6A, and 6B).

In an analogous art dealing with PTT radios, Hodsdon teaches of a visual display (Figure 1 and starting column 3, line 66 and ending column 4, line 1) and the light emitting element and the light receiving element being disposed above the visual display on a rear face of the cabinet (Figure 1 and column 4, lines 10 – 12; note that the antenna, like the light emitting and receiving

device, transmits and receives waves and further is placed in such a position, as known in the art for maximum performance, as it now is not obstructed by the device itself).

It would have been obvious to one skilled in the art at the time of invention to have included into Kaoru and Yamaha's vehicular communication device using PTT, Hodsdon's PTT's devices display and transmitting/receiving device structural positioning above the device, for the purposes of unobstructed (and thus line of sight communications) and the ability to view channel status of the radio, as taught by Hodsdon.

6. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaoru (Kaoru, Japanese Patent Application No. 01-077803) in view of Koichi et al. (Koichi, Japanese Patent Application No. 05-036851) and Yamaha Hatsudoki (Yamaha, Japanese Patent Application No. 62-94447) as applied to claims 1 and 6 above, and further in view of Hodsdon (Hodsdon, US Patent No. 4,972,051).

Regarding claims 2 and 7, Kaoru in view of Koichi and Yamaha, teach all the claimed limitations as recited in claims 1 and 6. Kaoru in view of Koichi and Yamaha, do not specifically teach of further comprising a frequency selecting dial above the communication operating means (though Yamaha teaches of PTT or and shows a dial in Figure 1).

In an analogous art dealing with PTT radio construction, Hodsdon teaches of further comprising a frequency selecting dial above the communication operating means (column 3, lines 6 –13).

It would have been obvious to one skilled in the art at the time of invention to have included into Kaoru, Koichi, and Yamaha's vehicular communication device using PTT,

Hodsdon's frequency selection, for the purposes of communicating with the desired recipient on a free channel, as taught by Hodsdon.

7. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaoru (Kaoru, Japanese Patent Application No. 01-077803) in view of Koichi et al. (Koichi, Japanese Patent Application No. 05-036851) and Yamaha Hatsudoki (Yamaha, Japanese Patent Application No. 62-94447) as applied to claims 3 and 8 above, and further in view of Schwerer (Schwerer, German Patent Application, DE 4,233,721).

Regarding claims 4 and 9, Kaoru, Koichi, and Yamaha, teach all the claimed limitations as recited in claims 3 and 8. Kaoru, Koichi, and Yamaha further teaches of wherein the communication operating means arranged at the vicinity of the grip is combined with the vehicular side infrared ray transmitter/receiver (Kaoru: Figures 4B, 6A and 6B, 5, 7, and 9 and the Constitution; Koichi: Figures 6 and 8 and the Constitution; and Yamaha: Figure 1).

Kaoru, Koichi, and Yamaha do not specifically teach of to thereby constitute an integrated module.

In related art dealing with a motorcycle police radio, Schwerer teaches of to thereby constitute an integrated module (Figure 1 and pages 1 and 2 of the translation, paragraphs 2 and 3).

It would have been obvious to one skilled in the art at the time of invention to have included into Kaoru, Koichi, and Yamaha's vehicular communication system, Schwerer's combined transmitter and receiver positioned near the steering column, for the purposes of easy access to both the transmitter and receiver, as taught by Schwerer.

8. Claims 5, 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaoru (Kaoru, Japanese Patent Application No. 01-077803) in view of Koichi et al. (Koichi, Japanese Patent Application No. 05-036851) and Yamaha Hatsudoki (Yamaha, Japanese Patent Application No. 62-94447) as applied to claims 1 and 6 above, and further in view of Hodsdon (Hodsdon, US Patent No. 4,972,051).

Regarding claims 5 and 10, Kaoru, in view of Koichi and Yamaha teach all the claimed limitations as recited in claims 1 and 6. Kaoru, in view of Koichi and Yamaha do not specifically teach of further comprising a display unit for indicating a transmitting/receiving state of the wireless communication means, said display unit disposed in a vicinity of the grip of the handlebar (though the combination of Kaoru, Koichi, and Yamaha teach of the wireless communication device located by the grip, Kaoru: Figures 4B, 6A and 6B, 5, 7, and 9 and the Constitution; Koichi: Figures 6 and 8 and the Constitution; and Yamaha: Figure1).

In an analogous art dealing with PTT radios, Hodsdon teaches of a display unit for indicating a transmitting/receiving state of the wireless communication means, said display unit disposed in a vicinity of the grip of the handlebar (Figure 1 and starting column 3, line 66 and ending column 4, line 1).

It would have been obvious to one skilled in the art at the time of invention to have included into Kaoru and Koichi, and Yamaha's vehicular communication device using PTT, Hodsdon's PTT's devices display and transmitting/receiving device structural positioning above the device, for the purposes of unobstructed (and thus line of sight communications) and the ability to view channel status of the radio, as taught by Hodsdon.

Regarding claims 12 and 13, Kaoru, in view of Koichi, Yamaha, and Hodsdon teach all the claimed limitations as recited in claims 5 and 10. Hodsdon further teaches of a light receiving element above the display unit (Figure 1 and column 4, lines 10 – 12; note that the antenna, like the light emitting and receiving device, transmits and receives waves and further is placed in such a position, as known in the art for maximum performance, as it now is not obstructed by the device itself, as would be necessary for Kaoru's operation, as IR cannot penetrate solid objects, due to its high frequency).

Citation of Pertinent Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Inventor	Publication	Number	Disclosure
Yamamoto	US Patent	5,625,336	Display for a Bicycle Having a Speed Changer

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-3462. The examiner can normally be reached on 9 - 6:30 PM Monday – Thursdays and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on (703) 308-7745. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tanmay S Lele
Examiner
Art Unit 2684

tsl
August 6, 2004

8/9/04

QUOCHIEN B. VUONG
PRIMARY EXAMINER